diseases which take an epidemic form, and are the most influenced by sanitary improvements.

When Sir William Gull tells us that there are 20,000 deaths annually from typhoid fever, and that these form but a small part of the deaths caused by infectious fevers, we cannot doubt that the necessity for strenuous effort is very great, and that any failure on the part of the nation and the Government to adopt all such measures as may most effectually narrow the area of infection, would lay both open to the gravest reproach. Above all, it is essential that hospitals for the isolation of all infectious cases should be provided in all our towns.

A TROPICAL FEVER.

By G. SHERMAN-BIGG, Allahabad, India,
Surgeon, Army Medical Department.

THERE is a fever in the tropics (for want of a better name, I call it tropical fever) which possesses certain characteristics of its own. Akin to malarial fever, and also to enteric, it cannot correctly be designated by either name. It is certainly sporadic, and usually attacks adults. That it is not due to the germs of malaria there is every reason to conclude, as neither quinine, arsenic, nor any other antifebrifuges exert any influence on the course of the disease. The great weakness, the dry raw-beef appearance of the tongue, the expixaxis, the sordes on the mouth and lips, the persistent headache, the indomitable thirst, and the loss of appetite, at first lead one to suspect enteric fever; but the obstinate constipation throughout the disease, the absence of tympanites and of gurgling in the right iliac region, the want of any eruption, and the clear intellect the patient maintains throughout, upset the theory of suppurpation. It cannot be classed as a fever of continued type, as there are decided remissions; nor can it be said to be relapsing fever, since it is not epidemic, and the attacks are irregular.

The disease runs its course in twenty-one days; and there is often a relapse, which resembles in severity and duration the primary attack. The temperature from the commencement of the illness resembles that of convalescence from true enteric fever, the difference between the morning and evening temperatures being as much as three, four, and even five degrees. It is usual for one of the internal organs to be principally affected. It may be the stomach, as shown by vomiting and nausea; or the lungs may be considerably congested, and in some cases pneumonic; or the liver may be enlarged and tender, accompanied occasionally with jaundice; or the spleen may be the seat of hyperæmia.

The disease is not usually fatal; but troublesome sequelæ generally result, the most common being thrombi, producing swelling, and oedema of one limb, with painful, tender, and enlarged iliac glands. The necropsy, when death has occurred in the early stage, shows congestion of the internal organ affected, with extensive congestion of the mucous membrane of the ileum. The jejunum and duodenum are also, though in a less degree, congested. In cases in which death has occurred later on in the disease, the special organ affected during life shows more marked evidence of congestion. For instance, the spleen may be enlarged to three or four times its natural size; it may be soft and friable, and of a dark red colour; or the liver may have a nutmeg appearance; or even the smallest bronchi may be considerably congested. The most important changes, however, take place in the small intestines; the congestion extends from the ileum to the lower part of the duodenum, and the mucous membrane is studded with patches of ulceration. The solitary glands and Peyer's patches are also the seats of ulceration; but they do not seem to be more especially selected than any other part of the lining membrane.

REMARKS.—Malaria is an important factor in the production of ague; but what part it plays in fevers of a continued and remittent type is a matter open to serious argument. It is true, that fevers of this latter class occur nearly exclusively in malarious districts; but may this not be a coincidence? People who have lived in the tropics must have noticed the carelessness, the want of thought and attention to the atmospheric changes. At one time, the weather may be warm and genial; and in half an hour's time, raw and damp. Anglo-Indians dance, indulge in violent exercise in thin and scanty attire, and then sit down in the open air, without thinking of changing or putting on a warmer covering. This sudden atmospheric change of temperature, acting on an overheated system, produces a severe chill; and, whereas in England we should have a severe influenza, here in India we have a fever, more or less severe, according to the health of our constitution. I see no reason why this chill should attack one organ in preference to another; and, just as in some cases it gives rise to congestion of the lungs, in others to hyperæmia of the liver or spleen, so I think there are fair grounds for supposing that, should the intestines be the weak point, the chill may produce a catarrhal inflammation, and so bring about the fever which, for want of a better name, I have termed tropical fever.

AN ADDRESS

ON THE

PAST, PRESENT, AND FUTURE OF MEDICINE.

Delivered at the Annual Meeting of the North of Ireland Branch of the British Medical Association.

By EDWARD C. THOMPSON, M.B.,

Surgeon to the County Tyrone Infirmary; President of the Branch.

GENTLEMEN,—I find it no easy matter, at this our annual gathering, to select for my address a subject of sufficient importance to engage your attention.

The various matters of interest to our profession have been so ably dealt with by my predecessors in office, and by many other eminent members of the British Medical Association, that it is with extreme diffidence and mistrust in my own powers I venture to address you to-day. Knowing, however, as I well do, the kind indulgence which you always extend to those who do their best, I will endeavour to fulfil the duty that devolves upon me, sincerely trusting that, in the treatment of the various matters relating to the profession of medicine, which I have selected for discussion, no word may fall from me likely to give offence to any one present or absent.

Gentlemen,—It is almost unnecessary to remind you of the antiquity of medicine. You are doubtless aware that it is the most ancient of all the sciences; and that, in the early ages, the practice of it was attributed to the gods. Æsculapius was the father of medicine; and, in the writings of Cicero, Homer, and many others, we find frequent mention made of the healing art. Herodotus tells us that the Chaldeans and Babylonians had no physicians, and that their sick were brought to the market-places for cure, where the passers-by interrogated them as to their symptoms. Again, we find that strange cures were recorded upon the walls of ancient Egyptian and Grecian sanctuaries—so that the temples, called after Æsculapius, served instead of hospitals for the study of disease. Galen tells us that medical instruction was first given at Rhodes, Cnidos, and Cos; and that the most celebrated physicians were educated at the latter seat of learning. Amongst the many sages who practised the art of medicine was Pythagoras, who travelled much in the East, and finally settled at Crotona, where he instructed his pupils in medicine. He does not appear to have dissected the human body; but comparative anatomy and dissection of the bodies of animals seem to have been his constant study. Herophilus, in the year B.C. 300, was probably the first real worker in the vast field of human anatomy; and the principal author, of any importance in medicine, was Acron of Agrigentum, whose services were of such importance during the prevalence of the great plague, which depopulated Athens nearly 2,200 years ago. It was, however, Hippocrates, one of the two celebrated sons of Cos, who first emancipated medicine from the trammels of superstition and corruption which disgraced it, and established it on something like a firm foundation. He seems to have watched, and recorded with great accuracy and closeness, the signs and symptoms of disease. So effectually did he perform this portion of his work, that we find Celsus stating that succeeding physicians, notwithstanding their improvements in the treatment of disease, owed their knowledge of its signs and symptoms to Hippocrates; indeed, so well did this wonderful physician appreciate the duties and responsibilities of his profession that, to this day, the celebrated Hippocratic oath should be inscribed in letters of gold upon the certificates of every student and practitioner of medicine. It is as follows: "I swear by Apollo, by Æsculapius, by Hygiea, and all the gods, that I will fulfil religiously, to the best of my power and judgment, the solemn promise and the written bond which I now make. I will honour my parents, the master who has taught me this art, and endeavour to minister to all his necessities; I will consider his children as my own brothers, and will teach them my profession, should they desire to follow it, without remuneration or bond. I will admit to my lessons my own sons, and those of my tutor, and those who have been inscribed as pupils and have taken the medical oath, but none else. I will prescribe such a course of regimen as may be suited to the condition of my patients, according to the best of my ability, power, and judgment, seeking to preserve them from anything that might prove injurious. No inducement shall ever lead me to administer poison, nor will I ever be the author of such advice; neither will I contribute to an abortion. I will maintain religiously the purity and integrity of my art. I will not cut any one for

stone, but will leave the operation to those who cultivate it. Into whatever dwellings I may go, I will enter them with the sole view of succouring the sick; abstaining from all injurious views and corruption, especially from any immodest action towards women or men, freemen or slave. If, during my attendance, or even unprofessionally, in common life, I happen to see or hear of any circumstances which should not be revealed, I will consider them a profound secret. May I rigidly observe this oath, and enjoy good success in life. Should I transgress and become a perjurer, may the reverse be my lot."

It is to Hippocrates we owe the merit of having first added philosophy and reasoning to experience, and of introducing those discussions which ultimately overthrew empiricism, and led to the triumph of dogmatism, under Galen, the celebrated physician, who travelled from Rome to Alexandria to study a human skeleton, and who published, as the result of his observations, anatomical descriptions of surpassing excellence. Ever since his time, notwithstanding that the medical profession has conjoined the results both of reasoning and experience, each method has had its own supporters. Even now, it is nothing uncommon to find men, calling themselves practical, entirely ignoring theory; on the other hand, we frequently meet with those who live by theory, and despise what they choose to call the practical man. The mean should be struck exactly between these opposing views; for the person who makes it his ambition to succeed as a physician or surgeon must be guided by the lessons of experience, even though they sometimes clash with the teachings of theory.

Cullen truly observed, many years ago, that everyone now-a-days pretends to neglect theory and stick to observation. But the first is in talk only; for every man has his theory, good or bad, which he occasionally employs; and the only difference is, that weak men, who have little extent of ability for, or who have had little experience in, reasoning, are most liable to be attached to frivolous theories; but the truly judicious practitioners and good observers are such as have the most extensive views of the animal economy, and know best the true account of the present state of theory, and, therefore, of the proper place to stop in the application of it.

If we regard the whole field of human knowledge, we must be led, it may be insensibly, to classify the various sciences under two heads; viz., the exact and the inexact. To Sir Isaac Newton belongs the honour of first demonstrating that all the heavenly bodies gravitate towards each other, by the same law that attracts bodies on the earth's surface towards its centre. In chemistry, the law of affinity is the fact upon which most of the phenomena of chemical science depend. The possession of this primitive fact gives, necessarily, great accuracy to those sciences in which it has been ascertained; and they are, therefore, called exact. But there are other sciences which possess no primitive fact; for instance, agriculture. No man can till the ground and cultivate the crops, and be certain of the same result upon each occasion. Many circumstances may occur which may entirely falsify his anticipations. A science such as this must be classed as inexact, and to this category medicine belongs.

Every day, however, new facts are being brought to light, new ideas formed, and a closer acquaintance acquired with the insidious nature and progress of many diseases. All this work is being quietly done, notwithstanding the giant obstacles placed in the way of our profession by an intelligent public, who, forgetful of the many sacrifices we have made for them, upbraid us in the strongest language because, forsooth, we support the practice of vivisection. In reality, however, by the Act of our Parliament passed some years since, we are practically deprived, in this country, of the opportunity of making experiments on living animals, and, as a necessary result, are being left far behind in the race after knowledge, and in the ascertainment of that primitive fact or law to which I have before alluded, by the physiologists of other countries. It is true, the Act does not in express words interdict all experiments upon animals; but it renders it so extremely difficult to procure a certificate or licence from the Secretary of State, that in reality it has had this effect.

The act, indeed, apparently contemplates, as the chief subjects of its operation, an imaginary class of unqualified persons, who, with no legitimate object in view, torture and take pleasure in torturing living animals. It is against this very devilish class of individuals the Act is most lenient, for instead of refusing to licence such persons, and hinting to them instead severe punishment, it in reality confounds them with our professional class of scientific investigators on whose inquiries the whole future progress of medicine depends, and whose names should be, if they are not, a sufficient guarantee for the purity of their motives. Let us contrast such treatment, with the almost unbounded trust, with which the world from time immemorial has regarded the character of our profession; consider the relation of closest intimacy and confidence to which we

are admitted in the sanctities and tendernesses of domestic life, and our responsibility of human life and death. Consider that there is not a member of our profession to whom the law does not allow full discretion, whether he shall kill the child to save the mother in certain difficulties of child-birth, and in contrast with all this, is it to be seriously maintained that society cannot trust us with the responsibility of performing experiments upon living animals; that our foremost workers cannot be trusted to behave honestly towards their brute fellow creatures? It is a sad pity that our legislators, in a moment of extreme weakness, were tempted to yield to the popular agitation of the moment, chiefly supported as it was by a noisy band of would-be philanthropic men and women; indeed, amidst all this outcry, how strange it is to detect the voice of the female, who must needs raise her hands in work for which she is unsuited, either mentally or socially.

The female enthusiast is rather a strange specimen of the philanthropic world, she is nearly always unmarried, and knows nothing of the world and less of science. She is generally incapable of reasoning, and she will not read, at any rate she does not read, the account of those stern undying truths which have been brought to light by vivisection. Do these philanthropists ever consider the monstrous cruelties practised daily under the name of sport, the agony endured by hunted animals, or the torture inflicted on fish and birds in the popular amusements of fishing and shooting, and the unrelenting deprivation of so many animals, for man's convenience, of their sexual life?

Do these philanthropic females, I ask again, ever consider that the feathers which adorn their persons, are in many instances torn from the quivering flesh of live birds? But alas, for modern consistency, which would be ludicrous in its very absurdity, were not the issues of life and death involved in its consideration, a wise legislature allows unskilled and unlicensed operators to ply their trade, without anaesthetics, upon the wretched brutes, and yet denies to the most humane and disinterested of men the means of carrying on their scientific researches into the causes and cure of disease?

In other countries the opposition to science, long raised by ignorance of its true nature, has gradually vanished, and the work has progressed unimpeded by outside restraints. Are these conditions to be allowed in this country to suffer change? Have not the results been so vast and so beneficial to the human race, that we may point to them with just pride, as we protest against any restriction being raised in the future other than those which suggest themselves to every enlightened mind.

To limit the search after truth is to stop the search in its entirety: for who can limit, or hold in check, the inquiries of the human mind? or who can direct the channels along which thought shall flow? Not even the most vehement antivivisectionists will, I think, maintain that the life of a man is not of infinitely greater value than that of a beast; and yet it is asserted that not a single scientific fact, or curative agent of the least benefit to mankind, has been discovered by vivisection. Why, have not the different sounds of the human heart, and the mysteries that shrouded their interpretation, in health and disease, been solved by experiments, or living animals—notably the horse? Was not the tourniquet one of the first outcomes of Harvey's great discovery of the circulation of the blood—an instrument which has probably saved more human lives than have been lost to the brute creation by the necessary investigations to elucidate this problem?

Was not the operation of transfusion and its utility ascertained from vivisection? Has not the human race benefited to an enormous extent by the well-known experiments of Dr. Marshall Hall, and Sir Charles Bell, into the nervous systems of animals; and more recently by those of Claude Bernard?

But not to go further back, let us recall to our memories the application to which M. Pasteur's invaluable studies into the facts of fermentation and putrefaction have received at the hands of Mr. Lister, in his writings on the antiseptic treatment of wounds—a practice which has already been the means of saving innumerable lives, and which has reduced the mortality, after severe operations, to a minimum. Again, out of the experimental studies of anthrax has grown a knowledge of various ways in which the contagium of that dreadful disease can be greatly mitigated, not only in man, but also in animals. M. Pasteur has also shown that by inoculation with the contagium of a very fatal fowl disease, he can mitigate its severity. A similar discovery has been made by Professor Semmer of Dorpat, that by treatment, like that with which the contagium of splenic fever is mitigated, he can bring the most virulent septic contagium into such a state, that it will be mild enough to serve for harmless inoculations, which shall be protective against future infections. And, lastly, we have the recent experiments of Koch as to the parasitic nature of tubercle, and its probable contagious character.

It would be impossible to point to work of greater promise to the

world than these various contributions to the knowledge of disease, and of its cure and prevention; and these contributions only could have come from the performance of experiments upon living animals.

Another great cry of the antivivisectionists is, that if animals must be experimented upon, it shall only be under the influence of anæsthetics. But is it not a positive and uncontradicted fact that the action of anæsthetics was ascertained by the experiments of Sir James Simpson upon living animals—a discovery which, as Sir James Paget so ably puts it, has more than any other added to the happiness of the human race?

"Past all counting," he says, "is the sum of happiness enjoyed by the millions who, in the last thirty-three years, have escaped the pains that were inevitable in physical operations, pains made more terrible by apprehension, more keen by close attention; sometimes awful in swift agony, sometimes prolonged beyond even the most patient endurance, and then renewed in memory, or in more terrible dreams."

Notwithstanding, however, that our legislature has recently placed such a heavy embargo upon the scientific investigation of disease by virtually prohibiting vivisection, let us shortly glance at the great progress the science of medicine has made within even recent years; and the immeasurable benefits which a merciful God, by its means, has conferred on suffering humanity.

I shall not refer to the difficulties overcome by the famous Haller; nor of the researches of Vesalius, Asellius, Harvey, Morgagni, Pott, Hunter, and many other equally eminent investigators. To do so in anything like a satisfactory manner, would occupy far too much of your time, and be outside the scope of an address such as the present. I refer to them, however, as it would ill become a writer passing in review the ancient history of medicine, and endeavouring shortly to detail the advantages mankind has derived from the practice of it, to omit from mention such honoured names.

The 17th Century brings back to our recollection, Radcliffe, Sydenham, Mead, Cheselden, who first performed the operation for relief of congenital cataract; and in the 18th Century, John Hunter was born, a name which must always recall pleasurable emotions in the breasts of all medical men; and one of itself sufficient to render a century famous.

Passing from the 18th to the 19th Century, we have much to be proud of, both in the names of those who have, alas! ceased from their labours, and of those who are still active workers in our midst. Amongst the former, I need only mention such names as Hey, Cooper, Swan, Abernethy, Robert Smith, Stokes, Graves, Liston, Leall, Fergusson, Crampton, and Edward Jenner, who by unparalleled perseverance and unflinching determination, convinced the world of the benefits of vaccination. Has any man approached Jenner as a benefactor of the human race? And yet, what has been his reward? A grateful country removed the statue erected to him in Trafalgar Square to make room for that of Sir Charles Napier. Base ingratitude, which almost makes one doubtful of the fairness of Englishmen; pitiful ignorance of the meaning of real glory. Let it pass, however; the name of the exterminator of small-pox will live, when that of the conqueror of Scinde has perished from memory. Amongst the living members of our profession, I need only mention Paget, Watson, Jenner, Spencer Wells, Lister, Sir Henry Thompson, Pasteur, Virchow, Bowman, Charcot, and many others of nearly equal eminence, to whose disinterested exertions is due in a great measure the great improvement which has taken place in recent years, both in the diagnosis and treatment of every form of disease and injury. This century can also boast of the discovery of anæsthetics by Sir James Simpson, and of the invention of the stethoscope by Laennec; of the ophthalmoscope, otoscope, laryngoscope, endoscope, aspirator, clinical thermometer, sphygmograph, and innumerable other instruments of the greatest ingenuity and mechanical skill. It is in surgery that the most evident advancement has taken place. The modern surgeon remembers with pride the triumphs of ovariectomy, which has been the blessed means of restoring to health and strength thousands of mothers. Thanks to the ingenuity of Von Graefe, the operation of cataract extraction has been much simplified, and made so certain of success, that statistical tables show nearly 90 per cent. of complete recoveries from blindness. Indeed, your distinguished townsman, Dr. McKeown, very recently brought under the notice of one of our meetings, statistical tables which showed the splendid result of fifty-three recoveries out of fifty-six cases operated on. By this single operation, numberless persons have been restored to the inestimable blessing of sight, who, but for it, would have ended their days in complete blindness. The operation of iridectomy, in glaucoma, has had a similar beneficial result. The abstruse optical investigations of Donders, Helmholtz, and others, have borne such ripe fruit, that numbers whose sight was comparatively useless, now enjoy it almost in perfection.

Professor Sayer's treatment of spinal curvature by suspension and the plaster-of-Paris jacket, has saved many lives, and cured hundreds of cases, hitherto considered entirely hopeless.

By Martin's elastic bandage, the cure of chronic ulcers, and other intractable skin affections, has been effected.

By Esmarch's elastic bandage, amputations, the ligature of arteries, and many other operations can be performed without the loss of a drop of blood. The application of the germ theory to the treatment of wounds has, I doubt not, saved the lives of innumerable able-bodied men and women. To the investigations of Sir Henry Thompson and Professor Bigelow we are indebted for the improvements in lithotomy. Professors M'Ewen and Adams have opened up an entirely new field of operative procedure in their subcutaneous osteotomies, and it is only quite lately that these operations have been added to the triumphs of surgery. In fact, the treatment of every disease and injury is now conducted on well ascertained principles; and although in medicine this rule does not apply so strictly as in surgery, owing to the uncertainty of drug treatment, still its advancement has been very great. Advancement in the knowledge of every branch of the profession of medicine, and blessings, past estimating, have been conferred on mankind, compared with which the achievements of our rival professions—such as the Church, the bar, and the military services sink into insignificance. And yet how frequently do we find these services ignored, and the recipients of them pass contemptuous remarks on doctors and doctoring generally. How often do we find, during the prevalence of some dangerous epidemic—wherever, indeed, there is sickness, sorrow, and death—the doctor's visit looked forward to with hope, and affording the only bright spot in a surrounding of utter darkness and despair. Yet, when the reverse prevails, and, owing to the physician's efforts, aided by God's goodness, the danger is past, and a loved one perhaps restored from the jaws of death to the arms of loving parents and friends, how frequently do we see the doctor forgotten, and his efforts talked slightly of?

Gentlemen, having endeavoured, in a necessarily short and imperfect manner, to point out to you—first, the great antiquity of medicine, and what is understood by its study; secondly, some of the difficulties which are placed in the way of its proper investigation; thirdly, the great advancement the science of medicine and surgery has made within recent years; and, fourthly, some of the advantages and blessings it has conferred on humanity, and the claim it has on the sympathy and respect of all men; let us now briefly proceed to consider the reason why the medical profession has not attained that public esteem and respect to which it is so justly entitled. Does not the blame rest on ourselves? I am afraid that, to some extent, this is the case. We have a criticising public to deal with, and being, in a measure, their servants, we cannot throw them off, although it cannot be said they are independent of us. There is, therefore, mutual dependence, and there should be mutual confidence. But how often do we find this rudely broken by the dishonest action of the practitioner, who, called to see a patient, in consultation with his brother practitioner, lets fall those little innuendoes which are so eagerly seized upon by the patient and his friends, and which say in acts, if not in words, how fortunate you called upon me in this case, for if you only adhere to the directions and treatment I now recommend, you may depend upon it your friend will get well.

Medical men must occasionally differ, both as to diagnosis and treatment. The greatest judges in the land frequently differ about the meaning of phrases, and often even as to the proper interpretation of words. Why, therefore, should it be thought so strange if one Doctor does not agree (on rare occasions) with another, in the interpretation of nature's most hidden and difficult secrets? It is not very long ago since I read in some English morning paper, that the House of Lords, as the highest legal tribunal, reversed a considerable proportion of the judgments of the next highest Court in the land, the Court of Appeal. Although, therefore, medical men sometimes disagree in their view of a difficult case, there is no reason why the difference of opinion, and treatment to be followed, should be made a subject of comment by the patient or his friends. On the contrary, the difference, if it exists, ought to be sacred as between man and man, and the public should be educated to understand that when medical men meet together in consultation, their whole intelligence and learning are given up to the difficult problems of unravelling the nature of their patient's case, and trying, with all the means science has placed at their disposal, to do the best in their power either to alleviate or cure their suffering fellow-creatures. At present, the public are too much in the habit of looking upon it as a natural characteristic of medical men to be always either abusing each other, differing in opinion, or standing on etiquette, and there really is sufficient grounds for the view thus taken. In large towns you hardly ever speak to a certain class of medical men without

eliciting from them some disparaging remarks about their *confrères* in the same town; and if I might particularise one place more than another where this habit is prevalent, I would mention Dublin. Until medical men cease this sort of treatment of each other, and learn to guard as sacred the honour of their profession, and of each member of it, in the consulting-room and out of it, we need not expect, and I will go further, and say, we do not deserve any great improvement in our social position. The Church and the Bar are ruled by the strictest etiquette, and hence the high social position of the members of these learned professions.

But I have digressed from the more immediate subject under discussion. The consultant should be a man whose opinion and standing in his profession command respect and confidence. How often have medical men been obliged to meet Doctors in whose opinion and judgment they placed no reliance, and whose conduct obliged them to be watched with the eye of a lynx, lest by any chance they should get a by-word at the patient or his friends. Consultants cannot be too careful in their conduct; they should guard with the greatest caution the professional character of their brother practitioner, and they should, at the same time, never forget the paramount duty they owe to their patient.

If a difference, unfortunately, should exist, a third consultant, in whose judgment reliance could be placed, should be called in as an arbitrator, without necessarily forfeiting either the respect or confidence of the patient or his friends. In consequence of the want of dependence on the part of general medical practitioners in each other, we often find great hesitation evinced on their part in asking help in difficult cases, greatly to their own injury and that of the public; whereas, if the ranks of our profession were properly organised, as I shall point out later on, no such hesitation would be possible or likely.

No doubt, we sometimes meet medical men who have made a serious error, but who are so obstinate in their opinion that they will listen to no reason. In a case of this description, our first duty is undoubtedly to our patient; and I hold the consultant would be justified in calling the patient's friends and, in the presence of the regular medical attendant, explaining the difference that existed, stating his own view of the case, and leaving it to them to act as they please. This is acting honestly towards your brother practitioner and your patient; and no reasonable man could complain of such treatment. At the same time, the consultant should, as much as possible, avoid the appearance of difference, and leave the regular medical attendant to give, as the outcome of the consultation, the directions, etc., that may have been determined upon. It is a common habit with consultants, even when they agree in diagnosis and treatment, to make some change in the prescription, to increase the quantity of a drug, or to change a tincture to an infusion, or to give a powder instead of pills, or to give in pill what is being administered in mixture, etc. Consultants may think little of this line of conduct, but it is most annoying to the practitioner, and should be studiously avoided by every honourable man. When a consultant sees there has been a correct diagnosis, and the general plan of treatment is being properly carried out, he should not interfere; but, on the contrary, should support in every way the opinion and treatment which has been recommended by the Doctor in attendance. Undoubtedly, the consultant may see some point in which the efficacy of a drug, which has already been prescribed, could be increased; but this should be told in the consulting-room to the medical attendant, and the alteration made quietly, when the next medicine was being prescribed. I repeat, the consultant should never be in too great a hurry, under the circumstances I have stated, to call for pen, ink, and paper, and for the purpose of pleasing the patient's friends, and to the chagrin of his professional brother, indite a long rambling prescription, as if he wanted to do something for his money. Consultants, too, often get themselves and others into trouble through the cross-questionings of patients' friends. To save themselves from this inconvenience, they should be most cautious to reply to no questions touching their patient's case in the absence of the regular medical attendant, for reasons that are sufficiently obvious.

There are many other points in this difficult subject that might be referred to with advantage, but time and your patience will not permit me to go further at present. I will, therefore, content myself by observing that a day of social advancement is so quickly approaching for our profession, and it is so rapidly improving, both in the tone and spirit of its members, that the time is not far distant when all medical men will understand in a truly practical manner the duty of being true to their profession and to each other.

Although it cannot be disputed that medicine, as a profession, is thus gradually raising its head, much remains to be effected before it can take the place it is entitled to occupy amongst the learned professions; indeed, our ranks must be reorganised and rearranged and some definite conclusion

come to in the matter of fees. To effect this purpose, I would suggest the division of the members of our profession into three distinct grades, as in the profession of the law, viz.,—1. The great teachers and consultants, represented by such men as Jenner, Bristowe, Watson, Paget, Erichsen, Holmes, etc. 2. The ordinary consultants, or those who have the highest academical and professional qualifications, are in large country or town practice, and are hospital physicians or surgeons. 3. The general practitioners. The first grade, or the great teachers of our profession, are men of such eminence that their services should be retained for teaching, and for the great duty of consultants of the first grade.

It must strike everyone as a great defect in our hospital system, the early period at which our great masters retire from active hospital work. Success, indeed, in our profession, means absorption of the whole time and attention in private practice. It is impossible for any single physician or surgeon to effect the needed reform, but this can be done by the formation of a class of pure consultants, whose fees should be so modified as to enable them to make the same income as at present, with one-third of the personal labour, and thus give some opening to those junior men who, settled in large towns and cities, aspire to the position of consultants, but whose advancement is retarded, most materially, by the reception of very small fees, by our great, and especially by our ordinary consultants. Let the election to this first grade be made by the medical colleges, and let the time and energy of our foremost minds be no longer at the mercy of any wealthy man, who, however trivial his complaint, determines to have the best advice, because it costs no more than the opinion of younger men. Of course, by no regulation can we prevent such a person consulting any one he pleases, but if he must occupy the time of the first physicians and surgeons of the day, he should be made to pay well for it. I hold, therefore, that the smallest honorarium in their own consulting rooms, for this, the first grade of our profession, should be at least equal to the usual fee of an ordinary Queen's counsel, viz., £4 4s.

By the plan which I have suggested, our consultants would gain time for leisure and study, and they would find it necessary, in order to sustain their reputation, to continue active workers in the wards of their hospitals. The gain would be a great one to medical education, and an almost greater one to the general public. The second grade, or ordinary consultants, should pass a strict and searching examination, and possess a degree which would mark their qualification for the position they wish to occupy. They should also agree among themselves to a standard fee, and it should be a point of honour with them never to vary from it. If our profession was thus organised, it would be impossible for the members belonging to the different grades I have mentioned to act unprofessionally towards each other, without running the risk of professional ostracism, and consequent ruin.

It is this second grade in our profession which so often has incurred the reproach of lowering instead of raising the honour of medicine. How frequently do we find, in large county towns, men styling themselves pure physicians or surgeons, keeping up a general sort of practice, and resting content with a fee of a few shillings; in fact, retaining, as if in memory of their days of drudgery, the fees belonging to the lowest grade of our profession!

How unjust this practice is to the struggling general practitioner, it is unnecessary to mention; and how difficult it makes it for him to uphold the dignity and interests of his profession. Only let these two principal classes raise themselves to the higher and more dignified position I have suggested, and it will not be very long before the struggling general practitioner or beginner lifts his head also, finding his hopes improve and his prospects brighten.

The third grade, or the general practitioner, upon whose back falls most of the burden and heat of the day, should consist of only one class. Unfortunately, it consists of two very distinct and separate classes: first, the prescribing or compounding physician; and, secondly, the practitioner who keeps a shop. It is the latter class which is so deplorable a bar to our social advancement. I have always considered the late Apothecaries' Act, which was smuggled through Parliament many years ago, and which allowed men with hardly any medical education the right to practise, as the foundation or commencement of this style of counter-prescribing, which has transferred in a great measure the care and treatment of the sick from properly qualified and thoroughly educated general practitioners to men possessing, it may be, some form of legal qualification, but quite ignorant of either the science or practice of medicine as it is understood now-a-days; in fact, transferring patients from the care of doctors, or men with a scientific knowledge of medicine, to the tender mercies of a trading practitioner, whose system of drugging and drenching his dupes is a heavier burden on the industrious and struggling classes than either the poor-rate or income-tax. How often have I seen poor creatures, it may be, destroyed or ruined for life, because, at the commencement of some serious illness, they

neglected to apply for relief to a regularly qualified physician or surgeon.

Every experienced physician knows well that, in the treatment of disease, but little medicine is really required. Every reading man knows that there is more robust health and less disease in Great Britain than in any other country in Europe, and yet I unhesitatingly assert that in this country there are more drugs, chemicals, and mineral waters consumed than in all the countries in Europe taken together.

What remedy can we apply to this state of things? A practitioner in country districts, away from towns, must doubtless supply his own medicines; but he should never sell it, thus lowering his profession to a trade. Indeed, every medical student, before being granted a degree, should be made to sign an undertaking such as the Hippocratic oath, which almost embraces everything that is necessary, never to degrade either himself or his profession by trading in medicine; with the certain punishment, if he did so, of having his name removed from the *Medical Register*.

In towns it would be well if medical men could be got to club together, form a company, and appoint a thoroughly qualified chemist to attend to the dispensing of the prescriptions of the various doctors who joined the association. This would drive competing chemists from the field, give probably a good return for the money invested, prove a real protection and advantage to the public by ensuring them good drugs, and greatly tend to improve the position of medical practitioners.

It is a strange but true fact, that in medicine the person who frequently succeeds best in the world, is not the highly educated gentleman, but the bustling busybody, who with, it may be a soft and unctious manner and an imposing equipage, parades his learning, or rather his ignorance, to a sympathetic indiscriminating public, who nearly always mistake self assertion for true knowledge. It is often by means such as these, coupled with complete disregard of professional etiquette, that practices are made, to the exclusion of men of merit and modesty, touting fellows often become the medical attendants even of the great, to whom they stand in relation of half friends, half underlings. I remember a medical friend of mine told me not very long ago that he had almost determined to give up the practice he had held for many years, he found it so hard, nay, impossible, to contend against some of the pranks of his brother practitioners in the same town, one of whom kept a drug store, a surgery, a consulting room, and a whiskey and wine store all in the same house; very convenient no doubt, but alas! in reality how often attended with disastrous consequences to the unhappy patients who are fools enough to consult, or place dependence in doctors of this description, and how damaging to our profession which tolerates the possibility of such a state of things. We all know that in England our profession in the lower grade is nothing but a trade, happily this does not apply as a general rule to Ireland, where the position of a medical man is somewhat more respectable, but even here we frequently meet with doctors in good position and fair practice, giving advice and innumerable boxes of pills or bottles of medicine for a few shillings.

Let us discuss for a few moments another branch of this part of our subject. Medical men frequently astonish a criticising public by their evidence in courts of justice, sometimes differing as to the interpretation of the plainest case without apparently even the smallest regard for their own character. Can we blame the laity if they sometimes sneer at our opinions, and even accuse us of violating the principles of honour? Such differences of opinion are generally most manifested in cases of railway accident; surely in such cases it should not be impossible for the medical man selected by the railway company, and for the injured individual, to meet together and discuss the various matters touching the patient's case honestly and fairly, and if a difference did unfortunately exist, and could not be reconciled, power should be given to call in an expert in whose judgment reliance could be placed, and whose skill in the special department of his art was unquestioned. By such means, doctors would be enabled to arrange their disagreements instead of proclaiming, as so frequently happens, to the world their irreconcilable jealousies.

It is, indeed, marvellous how the backbitings and disagreements of medical men, in these days of enlightenment and progress, can continue to exist. I believe they are first fostered and brought into life in the various schools, colleges, and hospitals of the United Kingdom, and the spirit there generated is infused into the students, and afterwards becomes the distinguishing characteristic of medical men generally.

Fortunately, when things are at their worst they usually begin to improve; and I have every confidence that, with the increase in medical education and the scientific training of our doctors and surgeons, such a wholesome spirit of unity and strength will be imported into our profession as to make it impossible for any member of it to act un-

professionally without drawing upon himself the anger of the whole body.

Nothing presents to my mind such a hopeful outlook for all of us as the success which attends the annual meetings of our Association, and the formation by its means of a connecting link between all grades and classes of the medical profession. That this is taking place—it may be slowly—is manifest by the rapid rise in social position of the army and navy medical services. I believe the recent improvement effected in the position of the officers of these important departments is merely an evidence of the increasing influence of the profession of medicine. The rivalry of our various educational colleges is a great blot upon our escutcheon; and we can only hope the Government Commission at present at work will recommend such changes in the various schools and colleges, by a process of amalgamation, if not of actual disestablishment, as will insure the success of the one portal examination system, so earnestly recommended and so universally supported by the members of our profession. Indeed, it is strange how Government has permitted the divided interests of our various medical schools to exist unchecked so long, to their own detriment as well as ours. How different from the "large-heartedness" which Hunter hoped "would always guide our teachers and colleges".

If, in passing, I might dwell for one moment on this all-absorbing question of education, I would suggest to those it is my great privilege to address here to-day, the necessity which exists for making the Irish medical schools more efficient in the practical or clinical instruction of their pupils. In our various professional colleges, there is no lack of lectures, delivered by lecturers who, I am very sorry to say, only too often cannot lecture; but there is an urgent want of larger opportunities for practical training in clinical medicine and surgery. No one can acquire skill in chemistry, physiology, or histology without practising experiments and manipulations in the laboratory; and it is equally impossible for students to become skilful physicians or surgeons who have not had actual personal labour in our hospitals. It is not enough for a student to have the opportunity of following his teacher round the wards of a hospital, an unit in a hundred or a hundred and fifty others, poking his nose over his comrade's shoulder, and standing upon tiptoe to try and get a glance at what is going on at the bedside of the patient, that the desired end is to be attained. No; it is by absolute hard work and patient investigation at the bedside of the sick, and there alone, that the student will gain the required practical knowledge, and will learn to apply those lessons which he reads in the splendid text-books which exist for his instruction and guidance. Our hospitals should be more thrown open to students, under, of course, reasonable rules, so as not to interfere with the comfort of the sick; and lectures, except in the wards or theatre of a hospital, and illustrated by living examples of the disease under discussion, should be abolished, as a mere waste of the time and money of the student. It takes a lecturer a very long time to explain the peculiar sound of healthy respiration, or the different murmurs in heart-disease; and, when he has finished his discourse, the immense majority of students are just as wise as they were at the commencement. Illustrate these different physical phenomena with a stethoscopic examination by the students of a patient suffering from the disease under discussion, and the result will be a very different one.

I repeat our hospitals should be more thrown open to students, and they should be encouraged to visit them, and inquire for themselves into the hidden mysteries of disease; by no other means will they attain that quickness of perception and readiness of resource without which no one will ever attain success as a physician or surgeon. Doubtless this question is surrounded with difficulties; there are in this country few large hospitals, and a small minority only of our students obtain dresserships; but, in addition to this, owing, I believe, to the lack of enthusiasm on the part of their teachers for clinical instruction, there seems a positive dislike, among students, to make use of the hospitals in the country districts in which they live. I know, where I reside, I am surrounded by students, who are being instructed both at Belfast and Dublin, yet they shun the opportunities that would be gladly and gratuitously given to them, both in the county infirmary and the workhouse hospital; and at both institutions, I verily believe, they would see enough to vastly improve their clinical knowledge, or rather clinical ignorance.

I remember well, when serving as surgeon in Her Majesty's Navy, that one of the staff-surgeons at Haslar Hospital laughed at me when I advocated, in conversation with him, the advantages of competitive examinations. "Why", said he, "in the hospital at present, one of my surgeons, who got first place at the late examination, could not apply a bandage, and would not take upon himself the responsibility of prescribing for a patient." This student was educated at one of the Irish Colleges, and his case is a sad reflection upon medical educa-

tion generally; but it is by no means an isolated example, and I have ventured to refer to it here merely to increase, if that be necessary or possible, the interest taken in clinical instruction in this College of Belfast—now, I believe, one of the educational departments of the Royal University, and which can boast of teachers second to none in Ireland.

Theoretical instruction is all very well, but I assert that, in this country, practical teaching is in a great measure ignored, and time wasted in cramming the heads of our students with learning, which they quickly forget, and which, from the want of practical knowledge, they cannot apply. I believe great improvement would take place in our social position if entrance into the profession of medicine was barred by a real searching preliminary examination, and if, in connection with our colleges, there existed preliminary training schools, where the student, having chosen his profession and having passed an entrance examination in Greek, Latin, Mathematics, Modern Languages, etc., could be instructed before entering college in those subjects which form the groundwork of his future studies, such as physical science, physiology, materia medica, chemistry, botany, and elementary anatomy—subjects which at present consume two years of the four spent in a medical college, and which allow very little time for clinical instruction. In these preliminary training schools, too, the student should be instructed in dressing and bandaging and in the use and application of the most important medical and surgical instruments; for instance, what is to prevent instruction being given in the use of the stethoscope, in so far at least as the healthy sounds of the chest are concerned, or in the mode of using the ophthalmoscope, tourniquet, thermometer, laryngoscope, and the various other every-day instruments in general use.

Instead of knowing anything of these various matters, our students go direct from school to college with generally a very loose smattering knowledge of classics and mathematics, and they spend the first two years of their college life in endeavouring to master the very subjects they should have learned at school, and are thus prevented from devoting their whole time to attendance in the dissecting room, and at hospital, where alone they can ever hope to really learn their profession. We have too many educational colleges, and no preliminary training schools. Our hospitals are too small, and are not made sufficient use of, and I am sorry to say our race of teachers is sadly degenerating. Where, for instance, in Ireland have we an authority of importance in any of the various departments of medicine or surgery? and where, might I ask, are we to look for the successors of Stokes, Corrigan, Colles, Adams, Crampton, Carmichael, and Robert Smith?

Our examinations, and our mode of conveying instruction, should be made more practical than it is, to be successful in the great object of examinations generally, and this is especially necessary in the profession of medicine, where shoals of young half-educated lads are annually let loose to learn their business, by endangering, in the first instance, the lives and health of their fellow-men. Our students are not to blame, but our colleges and teachers in this country and in Scotland are, and the sooner they come to know it the better. As I have said, I have come across a good many Queen's College and Dublin students, and they, one and all, are walking encyclopedias of medical lore, which, unfortunately, they are able to make little use of, owing to the absence of good sound clinical instruction. The time has come, therefore, when Government should insist upon every student passing, by a strict and searching theoretical and practical examination, through the only possible entrance to our profession, viz., the one portal examination system, and the public, if they have any regard for their own safety, should insist on the speedy accomplishment of this, to them, most important end. I most sincerely trust that a great future lies before our colleges, and that the changes which most of us so much desire, will be pregnant with good results, both as regards the advancement of science, and the eligibility of those who have taken upon themselves the responsibility of the medical profession. I have referred at some length, but I fear in a very clumsy manner, to this great question of medical education, because I see in it the true means of raising the respectability and public influence of our noble and disinterested profession.

In the discussion of the various questions which have engaged our attention to-day, I have endeavoured to avoid giving offence to anyone, and I hope I have succeeded. It is, however, impossible to discuss, even as shortly and imperfectly as I have attempted to do, a few of the many pressing professional questions of the day, without treading upon the interests or susceptibilities of some one. I have conveyed to you merely my own opinion on these various matters, and the mode in which I would deal with them, and, in conclusion, I desire to thank you most sincerely for the great honour you conferred upon me last year, by electing me to fill the high office of President of the North of

Ireland Branch of the British Medical Association, which has done so much to join us together in the bond of brotherhood and friendship, and which has tended in such a marked manner to advance the position and interests of that profession which we all so much love, and which I hope it is the end and object of our lives to see raised some day to that proud position of influence and dignity, to which it is so eminently entitled.

A NEW METHOD FOR THE CURE OF SALIVARY FISTULA OF STENSON'S DUCT.

By DR. L. G. RICHELOT,

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WHEN an opening is made, through any cause whatever, in the course of Stenson's duct, the wound either heals easily or the anterior portion of the duct contracts and becomes obliterated, the saliva continuing to flow out of the fistulous orifice. In the last case, a salivary fistula of Stenson's duct is established, and has no tendency to close, since the anterior portion of the duct is no more able to transmit the secretion of the parotid gland. It is evident that an operation alone can remedy this morbid condition, by re-establishing the continuity of the salivary duct in its course along the tissues of the cheek. Many methods have been recommended for the cure of this infirmity, on account of the difficulties inherent to the subject, the different opinions of surgeons, and the different clinical forms that a fistula may assume, according to its cause, its precise seat, and its local complications. In case of complete obstruction of the orifice of the duct, the aim is always to create a new issue for the saliva into the buccal cavity by establishing a kind of internal salivary fistula on the soft parts of the cheek.

On this principle, Leroy, Monro, Desault, Duphœnix, Deguise, and Béclard have proceeded in very different ways, which I will not enumerate, as they are to be found in most treatises on the subject. I will only remark that the practice of introducing, as Monro recommends, a seton which goes through both the thickness of the cheek and the fistula, is an uncertain way of restoring the normal course of the canals, because the presence of the thread prevents the closure of the fistulous orifice in the cheek; and, when the thread is removed, that orifice remains open, and resists all endeavours to close by means of a suture, if the anterior portion, previously formed and maintained for a time by the seton, should contract and close, as generally happens under the circumstances. The principle that we must follow is to succeed in obliterating the fistula in the cheek during the period that the saliva is being conducted into the mouth by the artificial aid of a seton, and not after the seton is withdrawn; for this conduction of the saliva once more along its proper course is the essential condition for the obliteration of the fistula. To apply this principle, care must be taken that the artificial anterior part of the duct is not only permeable when the fistula in the cheek is sutured, but is also kept open by artificial means as long as the sutured fistulous orifice remains imperfectly closed. From this point of view, Duphœnix's cannula seems to me, *à priori*, superior to Desault's seton, and even to the method of Deguise; but I repeat that my aim is not to criticise in detail facts already known.

A case of salivary fistula has recently been under my care, where, from its very nature, I have been able to carry out the above principles; and this after a method differing in certain respects from any hitherto adopted. The method I have originated seems to me worthy of the attention of the profession, because it may, if I am not mistaken, be practised in almost all cases of salivary fistula, and because it has, over the other methods known to be efficient, the double advantage of being simple and easily tolerated by the tissues involved in the operation.

Alfred Weber, aged 42, stoker, was admitted at St. Louis Hospital, ward St. Augustin, No. 22, in August 1881, when I was in charge of Dr. Le Dentu's patients. This man had been shot through the right cheek twenty-five years previously; the jaws are now practically ankylosed, as they can only be parted to the extent of one millimètre; the food is introduced in very small fragments over a broken tooth, and is swallowed without mastication. For the last two years, the health had been perfect, and the idea of an operation after the principles of Esamarch or of Rizzoli, to mobilise the jaws, was abandoned.

The patient entered the hospital for the cure of a salivary fistula of Stenson's duct, which was, like the ankylosis, the result of the old wound, and which had its seat on the posterior part of the duct, on the surface of the left masseter. This complication had passed through different phases; from time to time an abscess, below the fistula, had formed on the surface of the masseter; as soon as it opened, the fistula closed on the saliva and began to flow by the